

PTO GRASS COLLECTION SYSTEM

MODEL# 23120910

CRZ, XRZ & XRZ Pro 2013-Newer





OPERATOR'S MANUAL

ASSEMBLY • OPERATION • MAINTENANCE

MANUAL PART#: Q0472

REV: 2.0 (Mar 2017)

RESIDENTIAL BAGGING SYSTEM

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Safety

- **1.** Read the operator's manual carefully and familiarize yourself with the proper use of your attachment. Do not allow anyone who is not acquainted with the Safety Instructions to use your attachment.
- 2. Know the controls and how to stop quickly. READ THE OPERATOR'S MANUAL!
- 3. Do not allow children to operate the vehicle. Do not allow adults to operate it without proper instruction.
- **4.** Be especially watchful of children and pets darting into the area while operating.
- **5.** Keep your eyes and mind on your unit while mowing or operating your attachment. Don't let others distract you.
- **6.** Do not attempt to operate your unit or mower when not in the driver's seat.
- **7.** Always stop unit when emptying the container.
- **8.** Stop unit, shut off deck attachment, set parking brake, shut off mower engine and remove spark plug wire before removing clogs, removing or replacing hose, boot, blower cone, or performing any maintenance.
- 9. Mow across the face of slopes (not steeper than 10 degrees); never up and down the face.
- **10.** It is recommended that the container be kept only half full when negotiating any slopes. Start mowing on slopes when the container is empty.
- **11.** Inspect your lawn and remove any foreign objects before mowing. Never deliberately run the mower across any foreign object.
- **12.** Wear ear protection if the noise level is offensive.
- **13.** Wear eye protection to prevent debris from damaging your eyes.

SAFETY

WARNING! NEVER operate the mower unless the discharge guard and either the deflector assembly or the vacuum collector adapter are fastened securely in place.

WARNING! Do not work around the mower deck boot or the blower area until you are certain that the mower blades and the blower impeller have stopped rotating.

WARNING! To avoid serious injury, perform maintenance on the vacuum collector; **ONLY AFTER STOPPING THE MOWER'S ENGINE AND WAITING FOR ALL MOVING PARTS TO COME TO A COMPLETE STOP.** Set the parking brake. Always remove the ignition key before beginning maintenance.

WARNING! For your own personal safety, ALWAYS mow ACROSS the face of slopes and NEVER UP and DOWN the face. NEVER attempt to mow excessively steep slopes, and use caution when turning on any slope.

Safety Alert Symbol



This Safety Alert Symbol means: "ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!"

This symbol is used to call attention to safety precautions that Should be followed by the operator to avoid accidents. When you see this symbol, carefully read the message that follows and heed its advice. Failure to comply with safety precautions could result in death or serious bodily injury.

Safety Signs

The signal words **DANGER, WARNING,** and **CAUTION** are used on the equipment safety signs. These words are intended to alert the viewer to the existence and the degree of hazard seriousness.



This signal word indicates a potentially hazardous situation which, if not avoided, will result in death or serious injury.

White letters on **RED**



This signal word indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

Black letters on **ORANGE**

It may also be used to alert against unsafe practices.



This signal word indicates a potentially hazardous situation exist which, if not avoided, will result in minor or moderate injury.

It may also be used to alert against unsafe practices.

Black letters on YELLOW

PECO LIMITED WARRANTY FOR NEW PRODUCTS

A. WHAT IS UNDER WARRANTY?

PECO extends the following warranties to the original purchaser of each new PECO consumer product subject to the following limitations.

- **1. PRODUCT WARRANTY:** Any part of any consumer product, which is defective in material or workmanship as delivered to the purchaser will be repaired or replaced, as PECO elects, without charge for parts or labor, if the defect appears within 12 months from the date of delivery of the product to the original purchaser. ALL DEFECTIVE PARTS MUST BE RETURNED TO PECO FOR INSPECTION TO DETERMINE VALIDITY OF WARRANTY CLAIMS. Freight and mailing will be borne by the customer.
- **2. PARTS REPLACED DURING WARRANTY:** Any new PECO part which is furnished in performance of this warranty and is defective in material or workmanship as delivered to the purchaser will be repaired or replaced, before the expiration of the original warranty period, whichever is later.
- **3. COMMERCIAL USE:** Products put to personal use around a single household or residence is considered 'Residential'; Products put to any business use (agricultural, commercial, or industrial) or used at multiple locations is considered 'Commercial.' Products designated as 'Commercial' are warrantied for 12 months from the date of delivery of the product to the original purchaser when used for in commercial applications. Products designated as 'Residential' are warrantied for 90 days from the date of delivery of the product to the original purchaser when in commercial applications.

B. SECURING WARRANTY ADJUSTMENTS

Call PECO for Return Authorization. Damaged or broken parts other than engines or batteries, must be returned to New PECO, Inc. at 10 Walden Drive, Arden, NC 28704 before any warranty adjustment can be authorized. At the time of requesting warranty adjustment, the purchaser must present evidence of the date of delivery of the product. The purchaser shall pay any charge for the product to and from Arden, NC.

C. ITEMS NOT COVERED BY PECO WARRANTY

Engines and batteries attached to PECO products are covered under a separate warranty by the respective manufacturer.

D. UNAPPROVED ALTERATION OR MODIFICATION

All obligations of New PECO, Inc. under this warranty shall be terminated if products are altered or modified in ways not approved by New PECO, Inc.

E. ACCIDENTS AND NORMAL MAINTENANCE

The warranty covers only defective material and workmanship. It does not cover depreciation or damage caused by normal wear, accident, improper use or abuse of products. The cost of normal maintenance and normal replacement of service items such as belts, cutting blades, hoses, etc., which are not defective shall be paid for by the purchaser.

F. NO REPRESENTATIONS ADDITIONAL WARRANTIES. DISCLAIMER

Neither New PECO, Inc. nor any company affiliated with it makes any warranties, representations or promises as to the quality of performance of its products other than those set forth herein. Except as described above, New PECO, Inc. makes no other warranties AND SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OF FITNESS AND MERCHANTABILITY.

G. PRODUCTS USED FOR RENTAL OR LEASE PURPOSES ARE WARRANTIED FOR 45 DAYS FROM DATE OF ORIGINAL SALE ONLY

H. REMEDIED EXCLUSIVE

The only remedies the purchaser has in connection with the breach or performance of any warranty on New PECO, Inc. consumer products are set forth above. In no event will PECO be liable for special incidental or consequential damages.

1. NO SERVICE CENTER WARRANTY

The selling Service Center makes no warranty on his own on any item warranted by New PECO, Inc. unless he delivers to purchaser a separate written warranty certificate specifically warranting the item. The dealer has no authority to make any representation or promise on behalf of PECO or to modify the terms of this warranty in any way.

2017 (v1.0)

Section I INTRODUCTION & DESCRIPTION

1-1 Introduction

Your grass collection system has been designed to give you a low maintenance, simple, and effective way to collect the grass clippings from your mower. This manual is provided to give you the necessary instructions to properly mount and operate the collection system on your mower. Please read this manual thoroughly. Understand what each control is for and how to use it. Observe all safety decal precautions on the machine and noted throughout the manual.

NOTE: All references made to right, left, front, rear, top or bottom are as viewed from the normal operator's position on the mower.

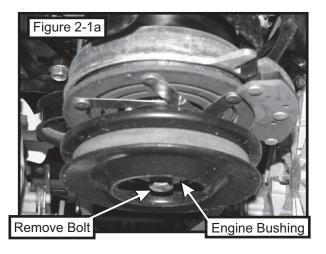
1-2 Description

The grass collection system is designed for turf maintenance where there is a need to collect the grass clippings as the mower cuts the turf. It is also used for picking up leaves in pre-season and post-season cleanup. The blower, mounted on the right side of the unit, uses a belt and gearbox system from the engine PTO shaft. Drive train protection comes through belt slippage. The blower draws grass clippings from the discharge area of the cutting deck back to the collection bags at the rear portion of the mower frame. The operator can engage the blower with a spring-lock engagement handle on the right side of the unit. Once the bags are full with clippings, they can be easily released for dumping.

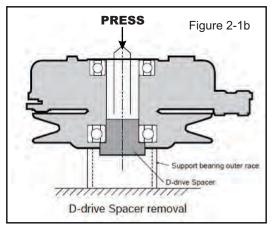
Section II INSTALLATION FOR USE

2-1 Preparation Of Mower

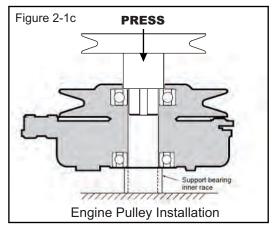
From the underside of the engine, disconnect the wiring harness attached to the electric clutch. Remove the bolt and electric clutch from the mower. Refer to Figure 2-1a.



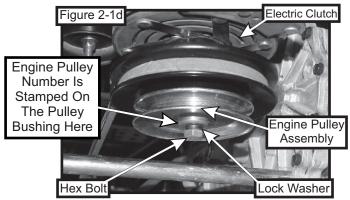
Remove the D-drive spacer using an arbor press or equivalent. On removal, adjacent bearing OUTER race must be supported or bearing damage may occur. Refer to Figure 2-1b.



The engine pulley assembly must be installed using an arbor press or equivalent. Upon Installation, opposite bearing inner race must be supported or bearing damage may occur. Refer to Figure 2-1c.



Use engine pulley assembly #2 P#(A0419). Fasten the engine pulley to the electric clutch assembly using (1) 7/16" hi-collar lock washer P#(K0140) and (1) 7/16"-20 x 4" HHCS P#(K0359) as shown in Figure 2-1d. The added pulley will power the collection system. Torque the bolt to 55 ft./lbs. Re-connect the wiring harness to the electric clutch.



2-2 Left and Right Frame Bracket Installation

Remove the rear bumper and hardware from the mower. Refer to Figure 2-2a.

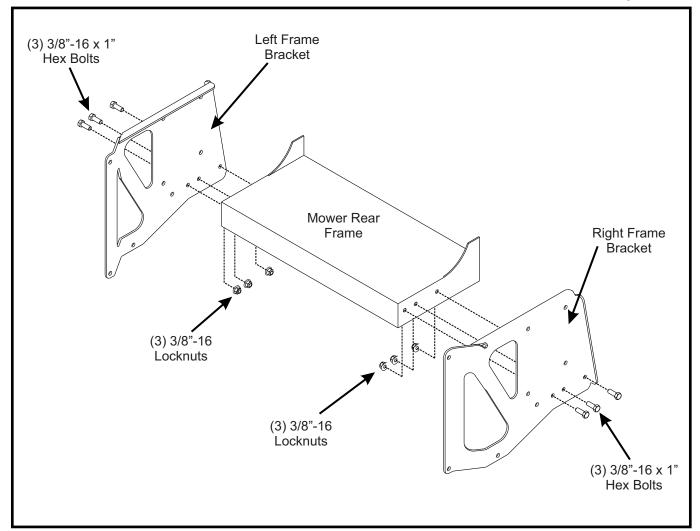
Figure 2-2a



Secure the left frame bracket P#(B0837) to the mower rear frame using (3) 3/8"-16 x 1" HHCS P#(K1191) and (3) 3/8"-16 nylon flange locknut P#(K2038). Leave the hardware slightly loose until all the frame components are installed. Refer to Figure 2-2b.

Secure the right frame bracket P#(B0836) to the mower rear frame using (3) 3/8"-16 x 1" HHCS P#(K1191) and (3) 3/8"-16 nylon flange locknut P#(K2038). Leave the hardware slightly loose until all the frame components are installed. Refer to Figure 2-2b.

Figure 2-2b



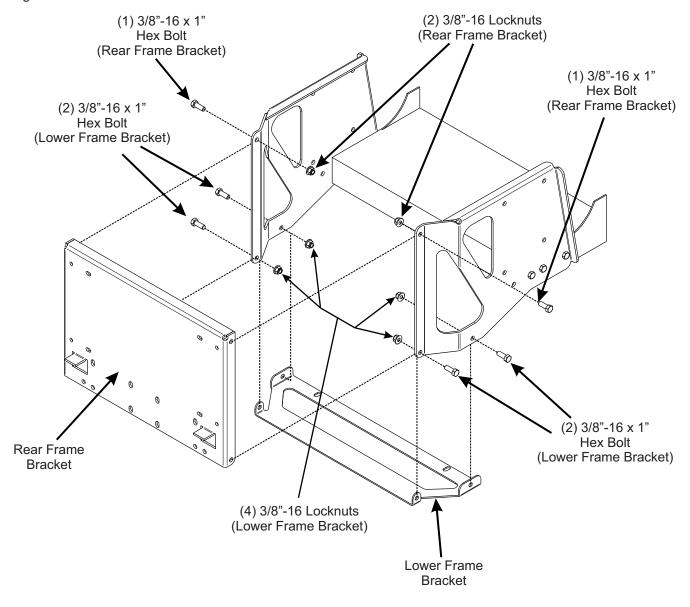
2-3 Rear Frame Bracket and Lower Frame Bracket Installation

Secure the rear frame bracket P#(B0855) to the inside of the left and right frame bracket using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nylon flange locknuts P#(K2038). Use the top mounting holes. Leave the hardware slightly loose until all the frame components have been installed. Refer to Figure 2-3.

Secure the lower frame bracket P#(B0838) to the inside of the left, right and rear frame bracket using (4) 3/8"-16 x 1" HHCS P#(K1191) and (4) 3/8"-16 nylon flange locknuts P#(K2038). Refer to Figure 2-3.

NOTE: Tighten all frame component hardware at this time.

Figure 2-3

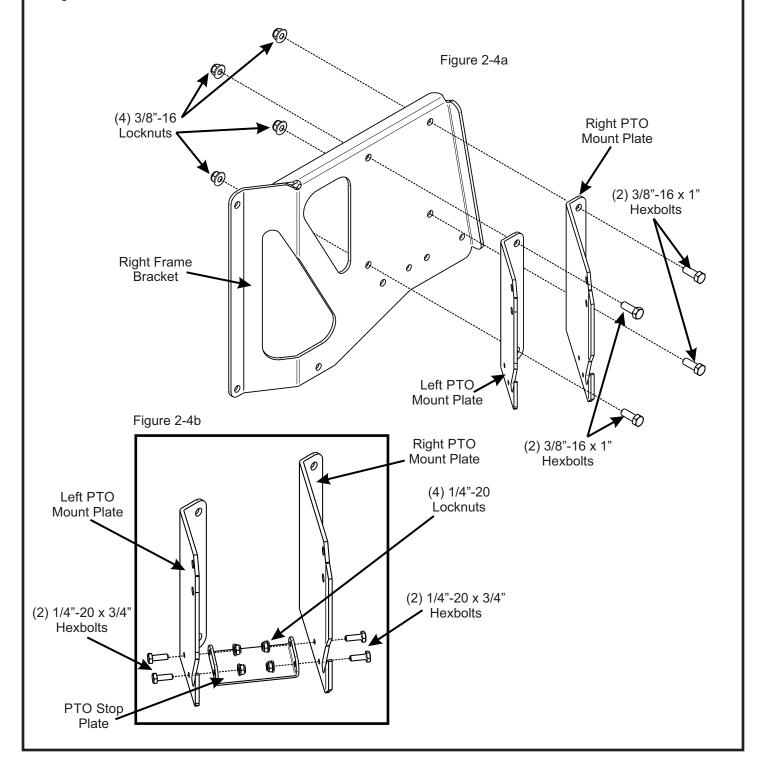


2-4 PTO Mount Plate Component Installation

Fasten the left PTO mount plate P#(B0748) the right frame bracket using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nylon flange locknuts P#(K2038). Do not tighten the hardware. Fasten the right PTO mount plate P#(B0747) to the right frame bracket using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nylon flange locknuts P#(K2038). Do not tighten the hardware. Refer to Figure 2-4a.

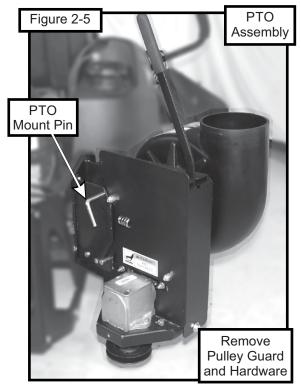
Insert the PTO stop plate P#(B0733) between the left and right PTO mount plates as shown in Figure 2-4b. Secure the PTO stop plate to the left and right PTO mount plates using (4) 1/4"-20 x 3/4" HHCS P#(K1222) and (4) 1/4"-20 nylon flange locknuts P#(K2014).

NOTE: Tighten all PTO mount plate component hardware at this time.



2-5 PTO Assembly Installation

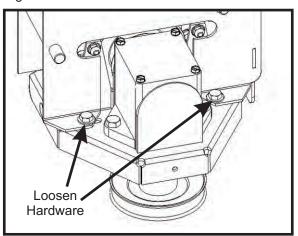
Insert the PTO assembly P#(A1840) into the mounting slots on the PTO mount plates, as shown in Figure 2-5. Secure the PTO assembly with (1) PTO mount pin P#(B0274) and (1) hair pin clip P#(K0086). Remove the gear box pulley guard and hardware from the PTO assembly in preparation for the belt installation.



2-6 Belt Installation and Adjustment and Pulley Guard Installation

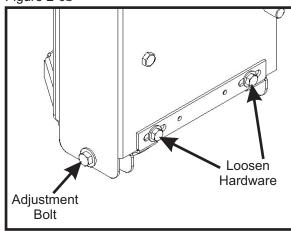
Installation/Removal: With the pulley guard, PTO mount pin and hair pin clip removed, loosen the (2) 5/16"-18 x 3/4" HHCS P#(K1153) that secure the gear box to the PTO assembly. Refer to Figure 2-6a.

Figure 2-6a

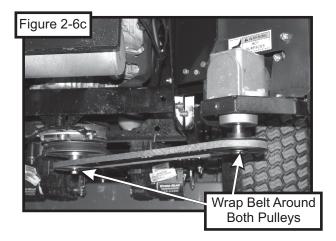


Loosen the (2) 5/16"- $18 \times 3/4$ " HHCS P#(K1153) that secure the gear box to the PTO assembly, as shown in Figure 2-6b. Loosen the adjustment bolt (1) 3/8"- 16×2 " hex bolt P#(K0348).

Figure 2-6b



Slide the gearbox towards the mower until there is enough clearance for the kevlar belt to slide over both the engine and gearbox pulleys. Install the A54K kevlar belt P#(M0255). Insert the PTO mount pin P#(B0274), and secure the pin with (1) hair pin clip P#(K0086). Refer to Figure 2-6c.



Adjustment: To adjust the belt tension, turn the adjustment bolt clockwise until there is 1" of deflection, with 10-11lbs of pressure applied to the center of the belt. When the belt has the proper tension, tighten the (4) 5/16"-18 x 3/4" HHCS that secure the gear box to the PTO assembly. Replace the pulley guard and hardware.

2-6 Belt Installation and Adjustment and Pulley Guard Installation Continued...

Secure the top belt guard P#(B0862) tot he right frame bracket using (1) 3/8"-16 x 1" HHCS P#(K1191) and (1) 3/8"-16 nylon flange locknut P#(K2038) from the mount kit hardware bag, as well as (1) 3/8"-16 x 1" HHCS P#(K1191) and (1) 3/8"-16 nylon flange locknut P#(K2038) used in securing the lower frame bracket to the right frame bracket. Refer to Figure 2-6d.

Replace the belt guard and hardware removed from Section 2-5. Refer to Figure 2-6e.

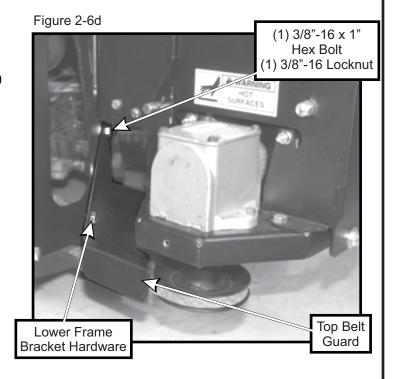
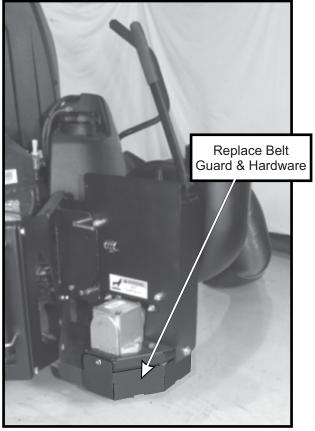
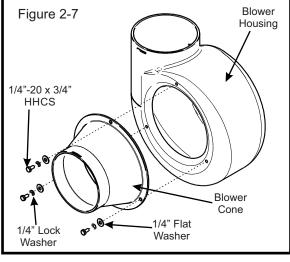


Figure 2-6e



2-7 Blower Cone Installation

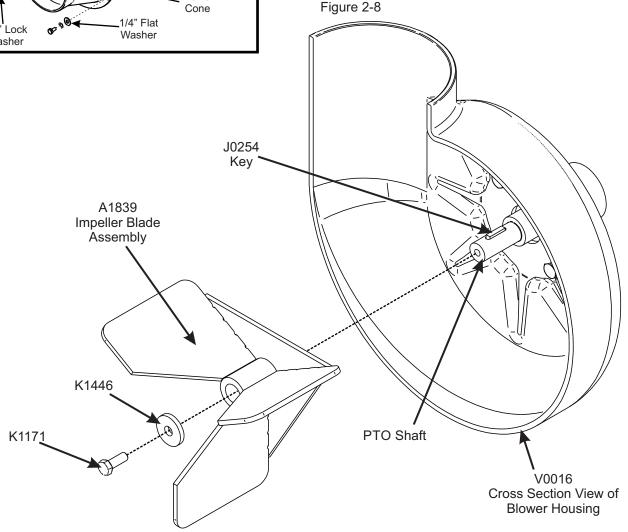
Fasten the blower cone P#(V0016) to the blower housing located on the PTO assembly. Use (3) 1/4"-20 x 3/4"HHCS P#(K1222), (3) 1/4" lock washers P#(K0039), and (3) 1/4" flat washers P#(K0037) to secure the blower cone to the blower housing. Refer to Figure 2-7 for reference.



2-8 Impeller Blade Removal/Replacement

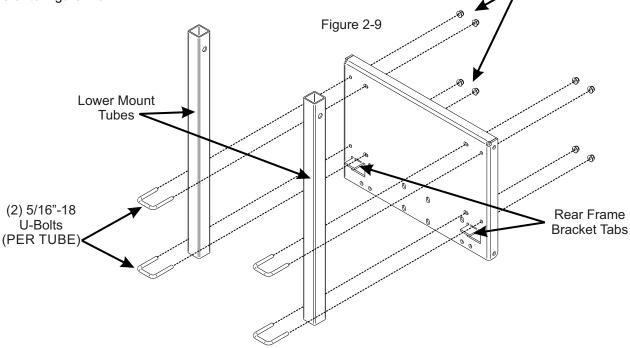
To Remove: To access the impeller blade, remove the blower cone P#(V0016) and blower cone hardware from the blower housing. Remove the 5/16"-24 x 7/8" left hand thread hex bolt P#(K1171) and washer P#(K1446). Insert (1) 1/2"-13 x 1" hex bolt into the threads on the impeller blade. Tighten the hex bolt until the impeller blade breaks free from the PTO shaft. Remove the impeller blade assembly P#(A1839) from the PTO shaft. Remove the key P#(J0254) from the PTO shaft.

To Replace: Insert the key P#(J0254) into the keyway slot on the PTO shaft. Align the keyway slot on the bushing of the impeller blade assembly with the key on the PTO shaft and insert the impeller blade onto the PTO shaft. Secure the impeller blade with (1) 5/16"-24 x 7/8" left hand thread hex bolt P#(K1171) and (1) washer P#(K1446). Replace the blower cone P#(V0016) and blower cone hardware. Refer to Figure 2-8 for reference.



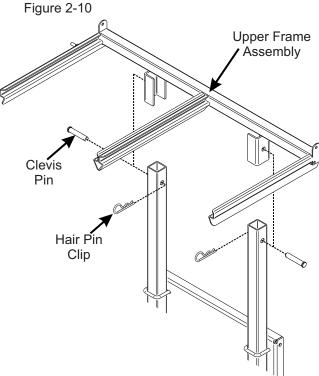
2-9 Lower Mount Tube Installation

Position the lower mount tubes P#(B0752) on top of the two tabs on the rear frame bracket. Secure each lower mount tube using (2) 5/16"-18 x 2-1/4" u-bolts P#(K1098) and (4) 5/16"-18 nylon flange locknuts P#(K2516) PER TUBE. Refer to Figure 2-9.



2-10 Upper Frame Assembly Installation

Position the upper frame assembly P#(A2047) as shown in Figure 2-10 and lower the assembly onto the lower mount tubes. Secure the upper frame assembly with (2) clevis pins P#(K0133) and (2) hair pin clips P#(K0088).



(4) 5/16"-18

Locknuts

(PER TUBE)

2-11 Top Assembly To Upper Frame Assembly Installation & Inlet Installation

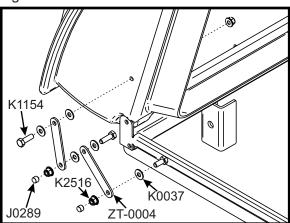
Position the top assembly P#(A2101) above the upper frame assembly as shown in Figure 2-11. Fasten the top assembly to the upper frame assembly using (2) 5/16"-18 x 2-1/2" HHCS P#(K0125) and (2) 5/16"-18 nylon flange locknuts P#(K2516). Leave the locknuts slightly loose, to allow the top assembly to open and close easily. Refer to Figure 2-11 for hardware location.

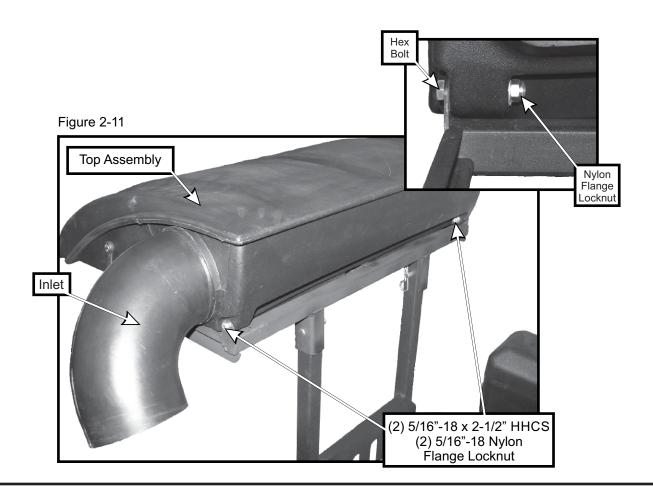
Insert the Inlet P#(V0025) into the hole on the top assembly from the inside and then snap the inlet into place. The inlet should pivot freely about the hole.

2-12 Hinge Kit Assembly Installation

Assemble the hinge kit as shown in Figure 2-12, using (2) 5/16"-18 x 1" HHCS P#(K1154), (3) 5/16"-18 nylon flange locknuts P#(K2516), (5) 1/4" flat washers P#(K0037) and (2) swing arm brackets P#(ZT-0004). Place (1) vinyl cap P#(J0289) on the end of the hex bolts as shown in Figure 2-12. Leave the nuts loose enough to allow fluid movement of the top when opening and closing. When opened, the top should rest on the middle joint of the hinge allowing it to remain up.

Figure 2-12

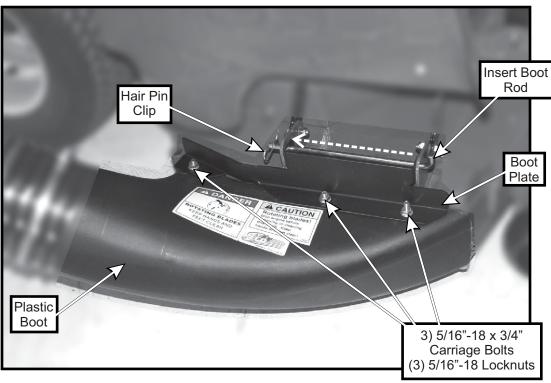




2-13 Boot To Mower Deck Installation

Secure the boot plate P#(B0807) to the top surface of the plastic boot P#(V1173) using (3) 5/16"- $18 \times 3/4$ " carriage bolts P#(K1142) and (3) 5/16"-18 nylon flange locknuts. Insert the carriage bolts from the inside so that the threads and locknuts are on the top of the boot plate. This will prevent grass clippings from collecting on the bolt threads. Secure the boot plate to the mower deck by inserting (1) boot rod P#(B0288) through the holes in the grass deflector mounting brackets. Insert (1) hair pin clip into the boot rod as shown in Figure 2-13.

Figure 2-13



2-14 Weight Kit Installation / Left Caster

To Install Weight Bracket

Step 1 - Position (#2) Base Under Caster Tubing w/ Opening Towards Caster Fork.

Step 2 - Position (#3) Clamp On Top Of Caster Tubing w/ Opening Towards Caster Fork.

Step 3 - Align (4) Holes In (#3) Clamp To Holes In (#2) Base

Step 4 - Loosly Fasten (#3) Clamp To (#2) Base Using (4) (#4.1) 5/16"-18 x 3" Bolts & (4) (#4.2) 5/16"-18 Ny-Flange Lock Nuts.

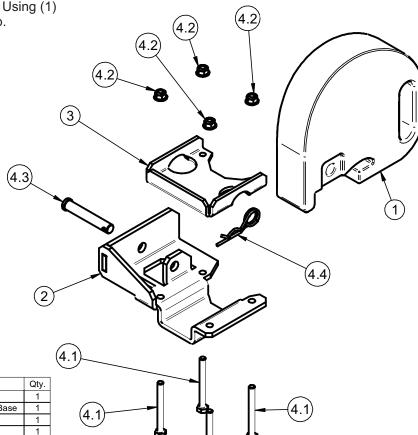
Step 5 - Position (#2 & #3) Assembly Along Caster Tubing To Prevent Interference From Caster Forks Or Any Other Objects. Tighten Fasteners In An ' Pattern Until Assembly Is Firmly Clamped To Caster Tubing. Do Not Overtighten Resulting In Bending (#3) Clamp.

Step 6 - Insert (#1) Weight Into (#2) Base & Align Hole In Weight w/ Holes In (#2) Base.

Step 7 - Fasten (#1) Weight To (#2) Base Using (1) (#4.3) Clevis Pin & (1) (#4.4) Hair Pin Clip.

Refer to Figure 2-14a.

Figure 2-14a



Item #	Part#	Desc.	Qty.
1	Y0025	28 lb. Suitcase Weight	1
2	B1021	Single Weight Bracket / Left Caster / Base	1
3	B1015	Weight Bracket / Clamp	1
4	HB0686	Single Weight Kit Hardware Bag	1
4.1	K1472	HHCS 5/16"-18 x 3" GR5	4
4.2	K2516	Ny-Flange Lock Nut 5/16"-18	4
4.3	K1473	Clevis Pin 1/2" x 3"	1
4.4	K1478	Hair Pin Cotter / Double Loop	1

2-14 Weight Kit Installation / Right Caster

To Install Weight Bracket

Step 1 - Position (#2) Base Under Caster Tubing w/ Opening Towards Caster Fork.

Step 2 - Position (#3) Clamp On Top Of Caster Tubing w/ Opening Towards Caster Fork.

Step 3 - Align (4) Holes In (#3) Clamp To Holes In (#2) Base

Step 4 - Loosly Fasten (#3) Clamp To (#2) Base Using (4) (#4.1) 5/16"-18 x 3" Bolts & (4) (#4.2) 5/16"-18 Ny-Flange Lock Nuts.

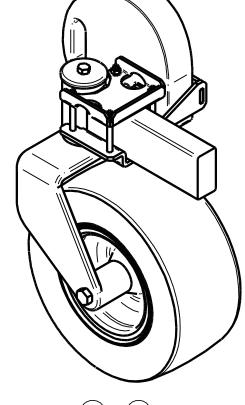
Step 5 - Position (#2 & #3) Assembly Along Caster Tubing To Prevent Interference From Caster Forks Or Any Other Objects. Tighten Fasteners In An ' Pattern Until Assembly Is Firmly Clamped To Caster Tubing. Do Not Overtighten Resulting In Bending (#3) Clamp.

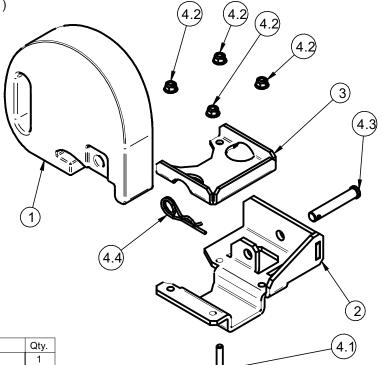
Step 6 - Insert (#1) Weight Into (#2) Base & Align Hole In Weight w/ Holes In (#2) Base.

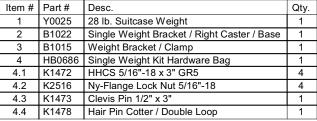
Step 7 - Fasten (#1) Weight To (#2) Base Using (1) (#4.3) Clevis Pin & (1) (#4.4) Hair Pin Clip.

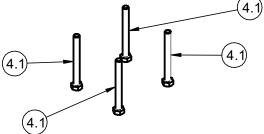
Refer to Figure 2-14b.

Figure 2-14b









2-15 Length Of Hose Adjustment

The hoses in steps 2-16 and 2-17 must be cut to fit your machine. Follow steps 2-16 and 2-17. do not cut the hoses until you have tried to fit them on your machine. Remember that the hoses have to be long enough to adjust for the blower assembly's movement as well as allow for enough clamping surface between the inlet, blower assembly, and the deck boot.

Note: The upper hose should be no shorter than 18".

2-16 Upper Hose Installation

Fasten the inlet to the plastic top by sliding the inlet from the inside of the top to the outside and lock into place. Slide a pre-assembled hose clamp P#(J0060) onto both ends of the 6" upper hose (Figure 2-18). Then slide one end of the 6" hose onto the inlet. Make sure there is about a two-inch overlap between the hose end and the container inlet. Proceed to slide the opposite end of the 6" hose onto the outlet of the blower assembly. See (Figure 2-18) for details. Make sure both ends of the hose are clearly attached to the inlet and the blower assembly inlet. Tighten the hose clamps.

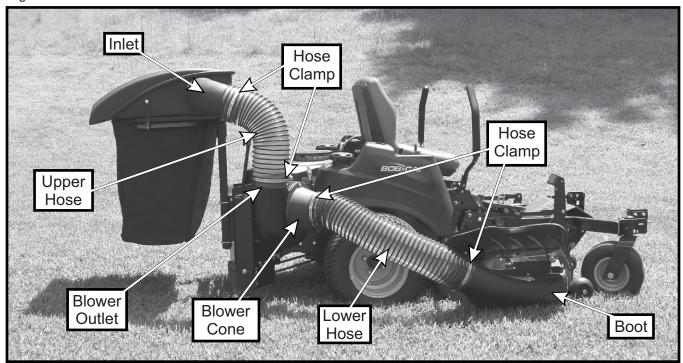
2-17 Lower Hose To Blower Cone Installation

Slide a pre-assembled hose clamp P#(J0060) over both ends of the lower hose. Then proceed to slide the lower hose onto the blower cone. Tighten the hose clamp. The assembly should look like Figure 2-18.

2-18 Lower Hose To Boot Installation

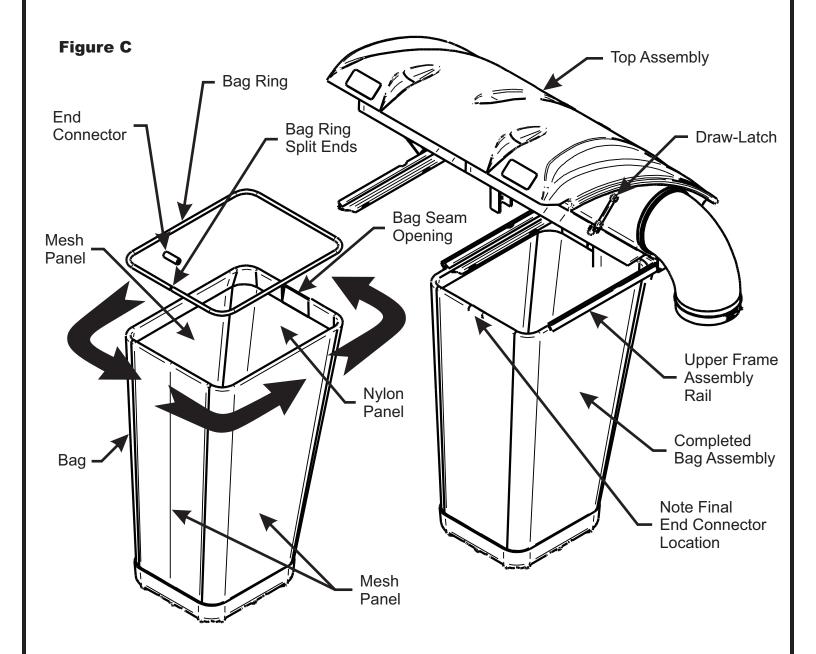
Take the unattached end of the lower hose and slide it over the circular end of the boot. Use the lower hose clamp to secure the hose to the boot (Figure 2-18). Tip: Before securing clamp rotate hose counter-clockwise (away from yourself) approximately 1" to aid in retaining boot to mower deck.

Figure 2-18



2-19 Bag Assembly

First, take one of the Bag Ring Split Ends and insert it through the Bag Seam Opening. Next, rotate the Bag around the Bag Ring (1) full turn (360 degrees) until the Bag Ring Split Ends and the Bag Seam Opening are positioned on the same side. Then, connect the Bag Ring Split Ends using (1) End Connector. Last, rotate the Bag Ring and the End Connector Assembly (1/2") turn (180 degrees) to position the Connector opposite of the Bag Seam Opening. Note Final End Connector Location below in Figure C. Repeat for each Bag.



2-20 Bag Assembly Installation

Slide the Completed Bag Assembly into the Upper Frame Assembly Rails and close the Top Assembly. Fasten the Draw-Latch on either side to hold the bagger closed.

SECTION III - P2B OPERATING INSTRUCTIONS

General Safety

Only qualified people familiar with this operator's manual and the mower's operator's manual should operate this machine.

Operation And Tips On Mowing

- A. Perform BEFORE EACH USE in the maintenance checklist under Section IV Maintenance.
- B. Start mower.
- C. With the mower at high idle speed, engage the mower deck.
- D. While seated in the operator's seat, pull the engagement handle of the PTO assembly towards the operator's seat until the handle slides into position in the retaining slot. With the PTO assembly engaged, you can proceed to operate the control levers of the mower.
- **NOTE:** If the collection system does not appear to be collecting the grass clippings, disengage the deck and PTO assembly, then, engage the parking brake and turn the mower off. Proceed to next section, and review the sections regarding PTO assembly Installation and belt installation/removal and adjustment. Check upper and lower hoses for any clogs.

To obtain the maximum effectiveness from your collection system the tips listed below should be followed:

- * Watch your speed- Normal conditions will allow a speed of up to approximately 5 mph, but thick, heavy damp conditions will require reduced ground speed.
- * Mow with sharp blades- A sharp blade cuts cleaner.
- * Wet grass and leaves will decrease effectiveness and will increase horsepower requirements.
- * Mow at higher cutting heights- Remove and mulch no more than 2" of grass length with each mowing. (Experts recommend not cutting off more than 1/3 of the grass blade length at any given time.)
- * Mow twice, at different height settings, (high, then low), if grass is extra tall.
- * Remember that horsepower requirements will vary with the mowing conditions such as type and height of turf grass, moisture content, amount of leaves, whether the terrain is flat or hilly, etc.

Disengagement Of The PTO Assy.

- A. To disengage the PTO assembly, slide the engagement handle out of the retaining slot and push the engagement handle away from the operator's seat.
- **WARNING:** The PTO assembly blades will continue to spin. DO NOT TOUCH the PTO assembly, pulleys, or the belt until the tractor is turned off. DO NOT adjust the belt tension until the mower is turned off. Refer to the belt adjustment section of the manual.

Unloading The Collection System

- **NOTE:** To determine when the collection bags are full, follow the following steps:
- A. Stop the forward movement of the mower.
- B. Disengage the mower deck.
- C. Disengage the blower.
- D. Engage the parking brake.
- E. Once the parking brake has been engaged, then and only then, walk behind the mower and check the collection bags by first unhooking the rubber strap with S-hook that secures the plastic top, then lift the plastic hood. Load in bags should not exceed the height of the installed bag.
- F. To remove the bags from the frame slide bags out and turn bags over to deposit clippings.
- G. Slide empty bags back onto the frame and secure plastic top with the rubber strap with S-hook.
- **NOTE:** Do not allow collection bags to become overfilled as potential damage may occur to your equipment. Also, be sure to clean the hood screen as needed.

SECTION IV - MAINTENANCE

Maintenance Checklist

NOTE: REMOVE PTO ASSEMBLY BEFORE RAISING DECK FOR MAINTENANCE.

Before each use:

- 1. Check blades and spindles to be sure that no foreign objects, such as wire or steel strapping bands, are wrapped around them.
- 2. Inspect blades for wear. Replace if necessary. If it is necessary to sharpen the blades, remove the blades from the spindles before sharpening. DO NOT sharpen blades while still attached to the mower.

- 3. Make sure all shields are in place and in good condition. Repair or replace any missing or damaged shields.
- 4. Perform lubrication per instructions.
- 5. Listen for abnormal sounds, which might indicate loose parts, damaged bearings, or other damage. Correct any deficiency before continuing operation.
- With the engine off, engage the blower assembly. Check the belt tension and inspect the pulley belt for cracks or tears.
- 7. Check for wear or deterioration of the upper or lower hoses. If there are any portions of the hose that have been torn or worn through, replace immediately.

After Each Use:

- Clean all debris from machine especially from the container, underneath the belt shields, and safety decals. Replace any missing or illegible decals.
- Inspect the unit for worn or damaged components.
 Repair or replace before the next use. Any
 replacement component installed during repair shall
 include the component's current safety decal specified
 by the manufacturers to be affixed to the component.
- 3. Under normal usage, the bag material is subject to deterioration and wear and should therefore be frequently checked for necessary replacement. Any replacement bag should be checked to ensure compliance with the original manufacturer's recommendations or specifications.
- 4. Check belt for proper tension.

Lubrication

Gearbox:

- 1. Every 20 hours of use: Check oil levels in gearbox.
- 2. First 60 hours of use: Change oil.
- 3. Every 100 hours of use: Change oil.

NOTE: Oil in gearbox should cover the gears. If not, drain the gearbox and fill using an 80W-90 gear oil. The gearbox ships with 6.0 oz. of oil, but we recommend replacing with a measured 5.5 oz. to fill the gearbox. **DO NOT OVERFILL!**

Blower Assembly:

NOTE: The following is for older PTO models that contain a greaseable zerc fitting. Newer models contain maintenance-free bearings and are without a greasable fitting.

- 1. On initial use: Grease the fitting on the blower shaft.
- 2. Every 25 hours of use: Re-grease the grease fitting.

NOTE: Use only white lithium based grease for lubrication of the shaft on the blower assembly.

SECTION V - PARTS & SERVICE

Parts And Service Information

Collection system owners should record the name and telephone number of their Service Center. Your Service Center will be happy to supply replacement parts, accessories, and do any service or repairs to your collection system. If for any reason your Service Center is unable to service your collection system or supply replacement parts, contact New Peco Inc. and include the following information on the chart below.

DOCUMENT THE FOLLOWING INFORMATION FOR FUTURE REFERENCE

Phone Number:		_
Address:	State:	Zip:
Dealer/Distributor Name:		
Date of purchase://		
Unit Serial Number:		
Unit Engine Size:		
Unit Model Number:		

New PECO, Inc.

10 Walden Dr | Arden, North Carolina 28704 Phone: 1-800-438-5823 | 828-684-1234

Fax: 828-684-0858

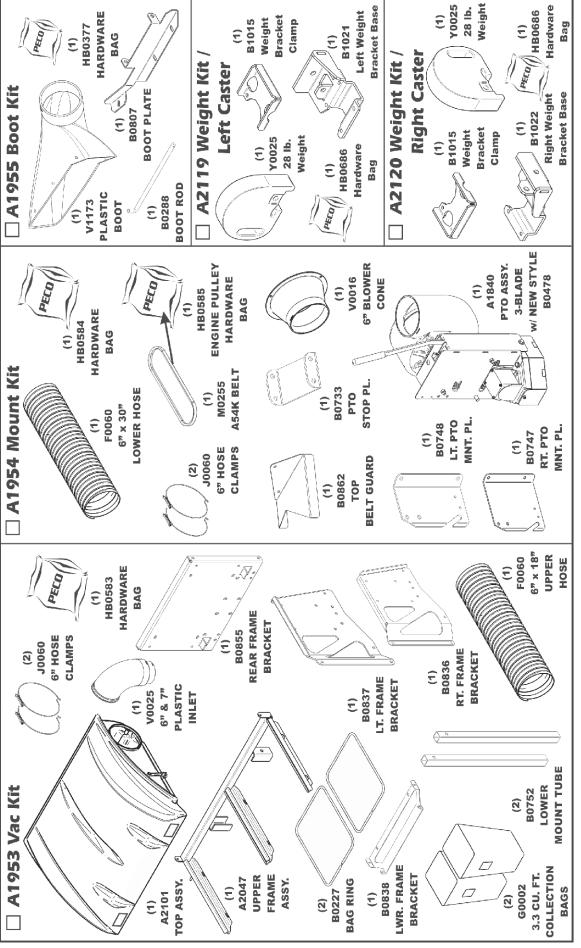
Email: <u>peco@lawnvac.com</u>
Website: www.lawnvac.com



M Unit Model #:

Mower & Type: Bob-Cat CRZ 942600, 942601, 942602 / XRZ 942610, 942611, 942612 / XRZ Pro 942620, 942621, 942622

	Engine Type: Kawasaki FR600V, FR651V, FR691V, FR730V	30V
	Deck Size & Type: 48", 52" & 61" IufDeck	Vac Type: 9 Cu. Ft. Pro 2+ Bagger
	Owner's Manual: Q0472	Drive Type: PTO Driven
Teleb Phawing	Revision #:Added XRZ Pro - 3/1/2017	Fits Year(s): 2013 - Newer

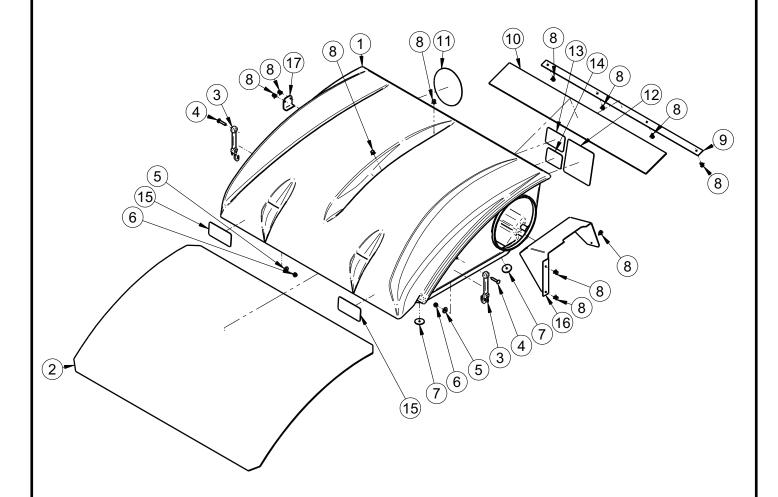


Y0025

Weight

28 lb.

TOP ASSEMBLY EXPLODED PARTS VIEW



Item #	Part #	Desc.	Qty.
1	V2000	Pro 2 Bagger Top / Gen. 2	1
2	V2001	Screen	1
3	J4009	Short Rubber Strap w/ S-Hook	2
4	K1030	1/4"-20 x 1-1/4" Carriage Bolt	2
5	K0037	Flat Washer / 1/4" (.75 OD x .312 ID x .060 T)	2
6	K1128	1/4"-20 Nyloc Nut	2
7	K0062	3/16" x 1-1/2" Fender Washer, Z	2
8	K0114	Black Plastic Rivet	11
9	C0067	Dust Guard Mnt. Brkt.	1
10	V1117	Dust Guard	1
11	R0022	Decal / Built In The USA / Lg	1
12	R1069	Decal / Warning - Turn Off Blower	1
13	R1054	Decal / Important Check Hoses	1
14	R1051	Decal / Warning - Use Hearing Protection	1
15	R1057	Decal / 2" x 4" Red Reflector	2
16	C0026	Grass Deflector	1
17	B0676	Hinge Stop PI.	1

A1840 PTO ASSEMBLY EXPLODED PARTS VIEW DESCRIPTION (18) 9 (9) (24) **4** 66 (24) 33 00 (2) (3) 42 (12) 4 (23) 6

A1840 PTO ASSEMBLY EXPLODED PARTS VIEW

Item #	Doc#	Title	Qty
1	M0266	'A' PULLEY FOR DECK DRIVE PTO	1
2	K1446	1.187 OD x .380 ID x .187 WASHER	2
3	k1190	3/8"-16 x 3/4" HHCS	1
4	V0015	BLOWER HSG.	1
5	A0431	GEAR BOX	1
6	A0498	PULLEY ASSY. FOR GEAR BOX	2
7	K0360	7/8" SNAP RING	2
8	J0272	#9 WOODRUFF KEY	2
9	K0035	5/16-18 SET SCREW	2
10	E0015	PTO SHAFT HOUSING	1
11	n0147	BEARING 2.0472 OD, 0.9843 ID, 0.5906 W (6205RS PEER)	1
12	B0460	PTO SHAFT	1
13	N0165	BEARING	1
14	J0801	1/4"-28 ZIRC FITTING	1
15	K1215	3/8"-16 FLANGE NUT	7
16	B0466	BASE PL.	1
17	B0478	GEAR BOX PULLEY GUARD	1
18	K1153	5/16"-18 x 3/4" HHCS	4
19	K1178	5/16"-18 FLANGE NUT	2
20	k1191	3/8"-16 x 1" HHCS	
21	K0037	1/4" FLAT WASHER .75 OD x .314 ID x .060 T	4
22	k1150	1/4"-20 x 2-1/4" HHCS	2
23	K1126	1/4"-20 FLANGE NUT	2
24	K1202	3/8"-16 x 4-1/2" HHCS G5	
25	k1216	3/8"-16 NYLOC NUT	2
26 27	K0348 k0042	3/8"-16 x 2" ALL THREAD HHCS 5/16" FLAT WASHER .875 OD x .380 ID x .075 T	1 5
28	K0042 K0353	1/4"-20 x 1/2" HHSTS	3
29	J0303	SPRING	2
30	K1192	3/8"-16 x 1-1/4" HHCS	4
31	M0267	A28K KEVLAR BELT	1
32	V1151	5/8" ID x 4-3/4" BLACK HANDLE GRIP	1
33	K0048	3/8" LOCK WASHER	1
34	B0505	PTO ARM MNT. ROD	1
35	B0506	LT. PTO ARM	1
36	B0642	BLWR. MNT. BRKT.	1
37	B0643	RT PTO ARM	1
38	A1112	PTO HANDLE ASSY	1
39	B0510	SPACER BUSHING	1
40	B0511	SPACER BUSHING	1
41	K0403	WASHER 1-1/2" OD x 3/8" ID	3
42	B0739	Blower Hsg. Stiffener Pl.	1
43	K0070	Flat Washer SS	1
44	J0254	3/16" x 3/16". x 3/4" Key	1
45	A1839	3-Blade Impeller Assy.	1
46	K1171	5/16"-24 LH x 7/8" HHCS GR. 5 w/ Patch Coating	1

SAFETY DECALS

To promote safe operation, New PECO, Inc. supplies safety decals on all products manufactured. Damage can occur to safety decals either through shipment, use or reconditioning. Contact your local Service Center for replacement decals.



Part #: R1100 Engage-Disengage Label



Part# R0022 Designed & Built In The USA



TO CLEAR DEBRIS WITH BLOWER RUNNING!

PELIGRO NUNCA USE MANOS PARA LINPIAR BASURA CON LA HOJA EN MARCHA! Part #: R2007 Danger - Never Use Hands





Part #: R2008 Danger - Rotating Blades

IMPORTANT

Hoses are subject to normal wear and deterioration. Check hoses frequently and if they become defective, install new hoses.

For best collection results, trim hoses so there are no more than 2 inches excess hose with mower deck lowered.

Part #: R1054 Important - Hose Wear



Part #: R4037 Warning: Hot Surface Label



Part #: R1051 Warning - Hearing Protection



Part #: R1069 Warning - Turn Off Blower



Part # R0025 Danger - Rotating Blades





Part #: R1057 - (2) Red Reflectors



Part #: R1052 Small Warning: Turn Off Blower Label

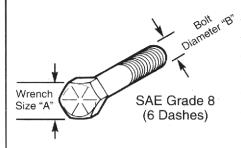
TORQUE SPECIFICATIONS

AMERICAN

Bolt Head Markings

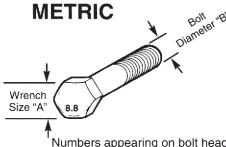






Recommended Torque in Foot Pounds (Newton Meters).*

T POLIT PLANETER T					
WRENCH SIZE (IN.) "A"	BOLT DIAMETER (IN.) "B" AND THREAD SIZE	SAE GRADE 2	SAE GRADE 5	SAE GRADE 8	
7/16	1/4 - 20 UNC	6 (7)	8 (11)	12 (16)	
7/16	1/4 - 28 UNF	6 (8)	10 (13)	14 (18)	
1/2	5/16 - 18 UNC	11 (15)	17 (23)	25 (33)	
1/2	5/16 - 24 UNF	13 (17)	19 (26)	27 (37)	
9/16	3/8 - 16 UNC	20 (27)	31 (42)	44 (60)	
9/16	3/8 - 24 UNF	23 (31)	35 (47)	49 (66)	
5/8	7/16 - 14 UNC	32 (43)	49 (66)	70 (95)	
5/8	. 7/16 - 20 UNF	36 (49)	55 (75)	78 (106)	
3/4	1/2 - 13 UNC	49 (66)	76 (103)	106 (144)	
3/4	1/2 - 20 UNF	55 (75)	85 (115)	120 (163)	
7/8	9/16 - 12 UNC	70 (95)	109 (148)	153 (207)	
7/8	9/16 - 18 UNF	79 (107)	122 (165)	172 (233)	
15/16	5/8 - 11 UNC	97 (131)	150 (203)	212 (287)	
15/16	5/8 - 18 UNF	110 (149)	170 (230)	240 (325)	
1-1/8	3/4 - 10 UNC	144 (195)	266 (360)	376 (509)	
1-1/8	3/4 - 16 UNF	192 (260)	297 (402)	420 (569)	
1-5/16	7/8 - 9 UNC	166 (225)	430 (583)	606 (821)	
1-5/16	7/8 - 14 UNF	184 (249)	474 (642)	668 (905)	
1-1/2	1 - 8 ŲNC	250 (339)	644 (873)	909 (1232)	
1-1/2	1 - 12 UNF	274 (371)	705 (955)	995 (1348)	
1-1/2	1 - 14 UNF	280 (379)	721 (977)	1019 (1381)	
1-11/16	1-1/8 - 7 UNC	354 (480)	795 (1077)	1288(1745)	
1-11/16	1-1/8 - 12 UNF	397 (538)	890 (1206)	1444 (1957)	
1-7/8	1-1/4 - 7 UNC	500 (678)	1120 (1518)	1817 (2462)	
1-7/8	1-1/4 - 12 UNF	553 (749)	1241 (1682)	2013 (2728)	
2-1/16	1-3/8 - 6 UNC	655 (887)	1470 (1992)	2382 (3228)	
2-1/16	1-3/8 - 12 UNF	746 (1011)	1672 (2266)	2712 (3675)	
2-1/4	1-1/2 - 6 UNC	870 (1179)	1950 (2642)	3161 (4283)	
2-1/4	1-1/2 - 12 UNF	979 (1327)	2194 (2973)	3557 (4820)	



Numbers appearing on bolt heads indicate ASTM class.

*Use 75% of the specified torque value for plated fasteners. Use 85% of the specified torque values for lubricated fasteners.

Recommended torque in foot pounds (newton Meters).*

WRENCH SIZE (mm) "A"	BOLT DIA. (mm) "B"	ASTM 4.6	ASTM 8.8	ASTM 9.8	ASTM 10.9
8	5	1.8 (2.4)		5.1 (6.9)	6.5 (8.8)
10	6	3 (4)		8.7 (12)	11.1 (15)
13	8	7.3 (10)		21.1 (29)	27 (37)
16	10	14.5 (20)		42 (57)	53 (72)
18	12	25 (34)	74 (100)	73 (99)	93 (126)
21	14	40 (54)	118 (160)	116 (157)	148 (201)
24	16	62 (84)	167 (226)	181 (245)	230 (312)
30	20	122 (165)	325 (440)		449 (608)
33	22		443 (600)		611 (828)
36	24	211 (286)	563 (763)		778 (1054)
41	27		821 (1112)		1138 (1542)
46	30	418 (566)	1119 (1516)		1547 (2096)

Troubleshooting Collection System Performance

Problem	Possible Cause Corrective A	
	Cutting blades are bent or unbalanced	Install new cutting blade
Abnormal Vibration	Loose blower pulley or pulley assembly	Tighten the pulley
	Impeller blade out of balance	Contact dealer to replace
	Low engine speed	Always operate collection system at full throttle
Reduced collection system performance	Plugged screen	Remove debris, leaves, or grass clippings from the screen
	• Loose belt	Replace/tighten belt
	Full collection bags	Empty the collection bags
	Collection bags are too full	Dump more frequently
	Low engine speed	Always operate collection system at full throttle
	Grass is too wet	Cut grass when it is dry
Blower and hoses plugging too frequently	Grass is too long	Cut the grass several times
	Ground speed is too fast	Drive slower at full throttle
	Worn belt	Replace belt
	Loose belt	Adjust the pulley and tighten belts
	Collection bags are too full	Dump more frequently
Debris blowout	Plug/clog in the collection system	Clean the collection system
	Ground speed is too fast	Drive more slowly at full throttle
	Plug in the blower housing	Clean the blower housing
Impeller doesn't rotate freely	Worn impeller blade	Contact dealer to replace
	Shaft bearings bad/failing	Contact dealer to replace



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